~~logic for~~ calculating a preferred width of the first compact layout as the square root of the total area; and

~~logic for~~ arranging the all descendant nodes into the first compact layout wherein the difference between the actual width and the preferred width of the first compact layout is minimized.

20.   (Currently Amended) The computer-readable medium of claim 17, wherein the logic for arranging all descendant nodes of a parent node of the deepest internal node comprises:

~~logic for~~ calculating a total area of all descendant nodes of the parent node, including the area of the sub-tree formed by the deepest internal node and the first compact layout;

~~logic for~~ calculating a preferred width of the second compact layout as the square root of the total area; and

~~logic for~~ arranging the all descendant nodes of the parent node into the second compact layout wherein the difference between the actual width and the preferred width of the second compact layout is minimized.

21.   (Currently Amended) The computer-readable medium of claim 17, wherein the logic for arranging all descendant nodes of the root node comprises:

~~logic for~~ calculating a total area of all descendant nodes of the root node, including the area of each resultant child sub-tree of the root node;

~~logic for~~ calculating a preferred width of the third compact layout as the square root of the total area; and

~~logic for~~ arranging the all descendant nodes of the root node into the third compact layout wherein the difference between the actual width and the preferred width of the third compact layout is minimized.